Results After Partial Left Ventriculectomy in a European Heart Failure Population

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Background:
Forty-nine consecutive patients undergoing partial left ventriculectomy (Batista) surgery between January 1995 and June 1998 were studied.

Methods:
Patient ages ranged from 12 to 85 years, and all patients were in New York Heart Association functional Class III or IV. Thirty-three patients had ischemic cardiomyopathy, and 16 had idiopathic myopathy. Inclusion criteria were left ventricular end diastolic volume index of > 150 mL/m2, left ventricular ejection fraction of < 20%, or left ventricular end-diastolic diameter of > 70 mm. Sixteen patients were transplant candidates. Partial left ventriculectomy and mitral valve repair by means of a Cosgrove annuloplasty ring plus the Alfieri repair constituted only part of the complex cardiac reconstruction in 38 patients.

Results:
Five patients died early and five patients died late between 3 and 30 months postoperatively. The actuarial 1-year survival rate was 81%. Twenty-seven patients with coronary artery disease underwent one to five bypass grafts when appropriate. In addition, three patients received aortic valve replacement, four received tricuspid valve repair, two received mitral valve replacement, and two underwent dynamic cardiomyoplasty. Left ventricular (LV) diameter could be reduced from a preoperative mean of 71 to 56 mm postoperatively. LV ejection fraction increased to 36% postoperatively. Ninety percent of patients are in New York Heart Association functional Class I or II.

Conclusions:
Patients with end-stage idiopathic or ischemic cardiomyopathies can be improved considerably with partial left ventriculectomy. Any cardiac comorbidity should be repaired simultaneously.